10747742 11/03/2008

L6 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:63611 HCAPLUS <<LOGINID::20080310>>

DOCUMENT NUMBER: 146:148846

TITLE: Pharmaceutical propylene glycol solvate compositions and method for preparation thereof

INVENTOR(S): Tawa, Mark; Almarsson, Orn; Remenar, Julius

PATENT ASSIGNEE(S): Transform Pharmaceuticals, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 33pp., Cont.-in-part of Appl.

No. PCT/US03/41273. CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 18

PATENT INFORMATION:

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                                                                   W 20040108
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                                                                   A 20040226
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AB The present invention provides a pharmaceutical composition comprising a propylene glycol solvate of a drug which is hygroscopic or has low aqueous solubility. It has surprisingly been found that by using propylene glycol to form a solvate of a hygroscopic drug, the hygroscopicity of the drug is

Roy P. Issac Page 2

US 2004-548343P

P 20040227

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decreased and/or the stability and aqueous solubility is increased. The drug is therefore much easier to formulate and store than its counterpart untreated or hydrated form.

IT 169590-42-5, Celecoxib

RL: RCT (Reactant); RACT (Reactant or reagent)

(pharmaceutical propylene glycol solvate compns. and method for preparation thereof)

RN 169590-42-5 HCAPLUS

CN Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1vl]- (CA INDEX NAME)

IT 639010-40-5P 919287-67-5P

RL: SPN (Synthetic preparation); PREP (Preparation)

(pharmaceutical propylene glycol solvate compns. and method for preparation thereof)

639010-40-5 HCAPLUS

CN Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]-, sodium salt, compd. with 1,2-propanediol, hydrate (1:1:1:3) (CA INDEX NAME)

CM 1

RN

CRN 169590-42-5

CMF C17 H14 F3 N3 O2 S

CM 2

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CRN 57-55-6
CMF C3 H8 O2
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OН

H3C-CH-CH2-ОН

RN 919287-67-5 HCAPLUS CN Benzenesulfonamide,

Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]-, sodium salt, compd. with 1,2-propanediol (1:1:1) (CA INDEX NAME)

CM

CRN 169590-42-5 CMF C17 H14 F3 N3 O2 S

CM :

CRN 57-55-6 CMF C3 H8 O2

OH

CN

H3C-CH-CH2-OH

IT 639010-33-6, Celecoxib sodium 639010-34-7, Celecoxib

lithium 639010-35-8, Celecoxib potassium

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical propylene glycol solvate compns. and method for preparation thereof)

RN 639010-33-6 HCAPLUS

Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]-, sodium salt (1:1) (CA INDEX NAME)

Na

RN 639010-34-7 HCAPLUS

CN Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]-, lithium salt (1:1) (CA INDEX NAME)

■ T.i

RN 639010-35-8 HCAPLUS

CN

Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]-, potassium salt (1:1) (CA INDEX NAME)

L6 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:754423 HCAPLUS <<LOGINID::20080310>>

DOCUMENT NUMBER: 141:282787

TITLE: Pharmaceutical cocrystal compositions of drugs such as

carbamazepine, celecoxib, and olanzapine

INVENTOR(S): Almarson, Oern: Bourghol Hickey, Magali: Peterson.

Almarsson, Oern; Bourghol Hickey, Magali; Peterson, Matthew; Zaworotko, Michael J.; Moulton, Brian;

Rodriguez-Hornedo, Nair

PATENT ASSIGNEE(S): Transform Pharmaceuticals, Inc., USA; University of South Florida; The Regents of the University of

Michigan SOURCE: PCT Int. Appl., 489 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 18

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TE, SI, LT, BR 2004013777 CN 1874993 JF 2007513867 US 2006134198 US 2006140985 US 2006223794 IN 2006KN00371 US 2007021510 PRIORITY APPLN. INFO.:	LV, FI, RO, MK, A 20061107 A 20061107 A 20070531 A1 20060622 A1 20070315 A1 20061005 A 20070622 A1 20070622 A1 20070629	CN 2004-80031982 JP 2006-525508 US 2005-541216 US 2005-541703 US 2005-546963 US 2005-551014 IN 2006-KN371	EE, HU, PH, SK, 20049904 20040904 20040904 20040904 20040904 20050629 20050708 20050728 20050

US 2004-581992P P 20040622 US 2004-586752P P 20040709 US 2004-588236P P 20040715 US 2004-590590P P 20040723 WO 2004-US29013 W 20040904

AB A pharmaceutical composition comprising a cocrystal of an active pharmaceutical ingredient (API) and a cocrystal forming compound wherein the API has at least 1 functional group selected from, e.g., ether, thioether, alc., thiol, aldehyde, ketone, thioketone, nitrate ester, phosphate ester, thiophosphate ester, ester, thioester, amine, secondary amine, ammonia, imidazole, or pyridine and the co-crystal forming compound has at least 1 functional group selected from e.g., amine, amide, pyridine, imidazole, indole, pyrrolidine, carbonyl, carboxyl, hydroxyl, phenol, or sulfone, such that the API and cocrystal forming compound are capable of co-crystallizing from a solution phase under crystallization conditions. Thus, carbamazepine and p-phthalaldehyde were dissolved in MeOH and slow evaporation of the solvent gave 1:1 carbamazepine-p-phthalaldehyde cocrystals. The cocrystals were characterized by powder x-ray diffraction, DSC and IR spectrometry.

IT 169590-42-5, Celecoxib RL: RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)

(pharmaceutical cocrystal compns. of drugs such as carbamazepine and celecoxib and olanzapine)

RN 169590-42-5 HCAPLUS

CN Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-vl]- (CA INDEX NAME)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:589730 HCAPLUS <<LOGINID::20080310>>

DOCUMENT NUMBER: 141:145692

TITLE: Pharmaceutical compositions with improved dissolution INVENTOR(S): Tawa, Mark; Remenar, Julius; Peterson, Matthew;

Almarsson, Orn; Guzman, Hector; Chen, Hongming;

Oliveira, Mark

PATENT ASSIGNEE(S): Transform Pharmaceuticals, Inc., USA SOURCE: PCT Int. Appl., 257 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 18

PATENT INFORMATION:

10747742 11/03/2008

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AB The invention relates to methods of screening mixts. containing a pharmaceutical and an excipient to identify properties of the pharmaceutical/excipient combination that retard solid-state nucleation. The invention further relates to increasing the solubility, dissoln. and bioavailability of a drug with low solubility in gastric fluids conditions by combining the drug with a precipitation retardant and an optional enhancer. Thus, a celecoxib hydrate or solvate was prepd.and its dissoln. and crystal properties were determined.

IT 639010-33-6P, Celecoxib sodium

RL: PKT (Pharmacokinetics); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Usea)

(pharmaceutical compns. with improved dissoln.)

RN 639010-33-6 HCAPLUS

CN Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]-, sodium salt (1:1) (CA INDEX NAME)

Na

IT 639010-42-7

RL: PKT (Pharmacokinetics); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pharmaceutical compns. with improved dissoln.)

RN 639010-42-7 HCAPLUS

CN Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]-, monosodium salt, hydrate (9CI) (CA INDEX NAME)

Na

IT 169590-42-5, Celecoxib Ri: PKT (Pharmacoxinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical comons, with improved dissoln.)

(pharmaceutical compns. with improved dissoin. RN 169590-42-5 HCAPLUS

CN Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1yl]- (CA INDEX NAME)

IT 639010-34-7P, Celecoxib lithium 639010-35-8F, Celecoxib potassium 639010-36-9P, Celecoxib calcium 639010-38-1P 639010-39-2P 639010-40-5P 919287-67-5P RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (pharmaceutical compns. with improved dissoln.)

RN 639010-34-7 HCAPLUS

CN Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]-, lithium salt (1:1) (CA INDEX NAME)

• Li

RN 639010-35-8 HCAPLUS

CN Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]-, potassium salt (1:1) (CA INDEX NAME)

■ K

RN 639010-36-9 HCAPLUS

CN

Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]-, calcium salt (2:1) (CA INDEX NAME)

●1/2 Ca

RN 639010-38-1 HCAPLUS CN

Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]-, monopotassium salt, compd. with 1,2-propanediol (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 639010-35-8 CMF C17 H14 F3 N3 O2 S . K

K

CM

CRN 57-55-6 CMF C3 H8 O2

ОН нзс-сн-сн2-он

10747742 11/03/2008

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RN 639010-39-2 HCAPLUS
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CM 1

CRN 639010-34-7 CMF C17 H14 F3 N3 O2 S . Li

● Li

CM 2

CRN 57-55-6 CMF C3 H8 O2

ОН

CN

H3C-CH-CH2-OH

RN 639010-40-5 HCAPLUS

Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]-, sodium salt, compd. with 1,2-propanediol, hydrate (1:1:1:3) (CA INDEX NAME)

CM 1

CRN 169590-42-5 CMF C17 H14 F3 N3 O2 S

CM 2

CRN 57-55-6 CMF C3 H8 O2

ОН

H3C-СН-СН2-ОН

RN 919287-67-5 HCAPLUS
CN Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]-, sodium salt, compd. with 1,2-propanediol (1:1:1) (CA INDEX NAME)

CM

CRN 169590-42-5 CMF C17 H14 F3 N3 O2 S

CM

CRN 57-55-6 CMF C3 H8 O2

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CN
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Benzenesulfonamide, 4-[3-(difluoromethyl)-5-(3-fluoro-4-methoxyphenyl)-1H-

169590-41-4 HCAPLUS

pyrazol-1-y1]- (CA INDEX NAME)

F2CH

RN 181695-72-7 HCAPLUS
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RN 202409-33-4 HCAPLUS CN 2,3'-Bipyridine, 5-chloro-6'-methyl-3-[4-(methylsulfonyl)phenyl]- (CA INDEX NAME)

L6 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2004:2673 HCAPLUS <<LOGINID::20080310>>

DOCUMENT NUMBER: TITLE: INVENTOR(S):

140:65197

Pharmaceutical compositions with improved dissolution Remenar, Julius; Peterson, Matthew; Almarsson, Orn; Guzman, Hector; Chen, Hongming; Tawa, Mark; Olivera,

PATENT ASSIGNEE(S): Transform Pharmaceuticals, Inc., USA SOURCE: PCT Int. Appl., 158 pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 18 PATENT INFORMATION:

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AB The invention relates to methods of screening mixts. containing a pharmaceutical compound an excipient to identify properties of the pharmaceutical compound/excipient combination that retard solid-state nucleation. The invention further relates to increasing the solubility, dissoln and bioavailability of a drug with low solubility in gastric fluids conditions by combining the drug with a recrystn./precipitation retardant and an optional enhancer. Thus, celecoxib sodium salt was prepared by dissolving celecoxib in IN NaOH solution The product was characterized by PXRD, DSC and

IT 639010-33-6P 639010-34-7P 639010-35-8P
639010-36-9P 639010-38-1P 919287-67-5P
RL: PKT (Pharmacokinetics); PRP (Properties); SPN (Synthetic preparation);
THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)

(pharmaceutical compns. with improved dissoln.)

RN 639010-33-6 HCAPLUS

CN Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1yl]-, sodium salt (1:1) (CA INDEX NAME)

Na

RN 639010-34-7 HCAPLUS

CN Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]-, lithium salt (1:1) (CA INDEX NAME)

● Li

RN 639010-35-8 HCAPLUS

CN Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]-, potassium salt (1:1) (CA INDEX NAME)

● K

RN 639010-36-9 HCAPLUS

CN Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]-, calcium salt (2:1) (CA INDEX NAME)

●1/2 Ca

RN 639010-38-1 HCAPLUS CN

Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]-, monopotassium salt, compd. with 1,2-propanediol (1:1) (9CI) (CA INDEX NAME)

1 CM

CRN 639010-35-8 CMF C17 H14 F3 N3 O2 S . K

K

CM

CRN 57-55-6 CMF C3 H8 O2

ОН нзс-сн-сн2-он

10747742 11/03/2008

RN 919287-67-5 HCAPLUS

CN Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]-, sodium salt, compd. with 1,2-propanediol (1:1:1) (CA INDEX NAME)

CM 1

CRN 169590-42-5 CMF C17 H14 F3 N3 O2 S

CM .

CRN 57-55-6 CMF C3 H8 O2

OH

RN

н₃С-Сн-Сн₂-Он

IT 169590-42-5, Celecoxib
 RL: PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pharmaceutical compns. with improved dissoln.) 169590-42-5 HCAPLUS

CN Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1yl]- (CA INDEX NAME)

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639010-39-2P 639010-40-5P 639010-41-6P
639010-42-7P
RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use);
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BIOL (Biological study); PREP (Preparation); USES (Uses) (pharmaceutical compns. with improved dissoln.)

RN 639010-39-2 HCAPLUS CN

Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1v1]-, monolithium salt, compd. with 1,2-propanediol (1:1) (9CI) (CA INDEX NAME)

1 CM

CRN 639010-34-7 CMF C17 H14 F3 N3 O2 S . Li

CM

CRN 57-55-6 C3 H8 O2 CMF

OH

H3C-CH-CH2-OH

RN 639010-40-5 HCAPLUS

CN Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1yl]-, sodium salt, compd. with 1,2-propanediol, hydrate (1:1:1:3) (CA INDEX NAME)

CM 1

CRN 169590-42-5

CMF C17 H14 F3 N3 O2 S

$$F_3C \bigvee_{Me}^{N} \bigcap_{O}^{O}$$

CM 2

CRN 57-55-6 CMF C3 H8 O2

ОН

н₃C-- Сн-- Сн₂-- Он

RN 639010-41-6 HCAPLUS
CN Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]-, monosodium salt, compd. with 2-propanol (9CI) (CA INDEX NAME)

CM

CRN 169590-42-5 CMF C17 H14 F3 N3 O2 S

CM

CRN 67-63-0 CMF C3 H8 O

OH | H3C-CH-CH3

RN 639010-42-7 HCAPLUS
CN Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]-, monosodium salt, hydrate (9CI) (CA INDEX NAME)

Na

IT 9004-34-6D, Cellulose, esters 9004-64-2, Hydroxypropyl cellulose 9004-66-3, HPMC 9004-96-0, Polyethylene glycol monooleate 106392-12-5, Foloxamer 162011-90-7, Rofecoxib 165950-41-4, Deracoxib 181695-72-7, Valdecoxib 202409-33-4, Etoricoxib RI: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical compns. with improved dissoln.)
RN 9004-34-6 HCAPLUS
Collulose (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9004-64-2 HCAPLUS

CN Cellulose, 2-hydroxypropyl ether (CA INDEX NAME)

CM

CRN 9004-34-6 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 57-55-6 CMF C3 H8 O2

OH

H3C-CH-CH2-OH

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RN
     9004-65-3 HCAPLUS
     Cellulose, 2-hydroxypropyl methyl ether (CA INDEX NAME)
     CM
     CRN 9004-34-6
     CMF Unspecified
     CCI PMS, MAN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     CRN 67-56-1
     CMF C H4 O
нзс-он
     CM
          3
     CRN 57-55-6
CMF C3 H8 O2
     OH
H3C-CH-CH2-OH
RN
    9004-96-0 HCAPLUS
CN
    Poly(oxy-1,2-ethanediyl), \alpha-[(9Z)-1-oxo-9-octadecen-1-yl]-\omega-
     hydroxy- (CA INDEX NAME)
Me- (CH<sub>2</sub>) 7-CH=CH- (CH<sub>2</sub>) 7-C - O-CH<sub>2</sub>-CH<sub>2</sub> OH
RN
     106392-12-5 HCAPLUS
CN
     Oxirane, 2-methyl-, polymer with oxirane, block (CA INDEX NAME)
     CM
         1
     CRN 75-56-9
     CMF C3 H6 O
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CM :

CRN 75-21-8 CMF C2 H4 O

,0

RN 162011-90-7 HCAPLUS

CN 2(5H)-Furanone, 4-[4-(methylsulfonyl)phenyl]-3-phenyl- (CA INDEX NAME)

RN 169590-41-4 HCAPLUS

CN Benzenesulfonamide, 4-[3-(difluoromethyl)-5-(3-fluoro-4-methoxyphenyl)-1Hpyrazol-1-yl]- (CA INDEX NAME)

F2CH

RN 181695-72-7 HCAPLUS

CN Benzenesulfonamide, 4-(5-methyl-3-phenyl-4-isoxazolyl)- (CA INDEX NAME)

202409-33-4 HCAPLUS

2,3'-Bipyridine, 5-chloro-6'-methyl-3-[4-(methylsulfonyl)phenyl]- (CA INDEX NAME)

L13 ANSWER 1 OF 16 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:1238781 HCAPLUS <<LOGINID::20080310>>

DOCUMENT NUMBER: 147:491657

TITLE: Novel low dose pharmaceutical compositions comprising

nimesulide, preparation and use thereof

INVENTOR(S): Jain, Rajesh; Jindal, Kour Chand

PATENT ASSIGNEE(S): Panacea Biotec Ltd., India

SOURCE: PCT Int. Appl., 40pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA:	TENT	NO.			KIN	D	DATE			APPL	ICAT		DATE				
						-									-		
WO	2007	1226	37		A1		2007	1101		WO 2	007-	IN16	2		2	0070	423
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		GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,
		KN,	KP,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	MG,	MK,
		MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,
		RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	TJ,	TM,	TN,	TR,	TT,
		TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	zw						
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,
		TS.	TT.	LT.	LU.	LV.	MC.	MT.	NI	PI	PT.	RO.	SE.	ST.	SK.	TR.	BF.

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BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW,
GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM
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IN 2006DE01033 A 20080118 IN 2006-DE1033 20060424 PRIORITY APPLN. INFO .: IN 2006-DE1033 A 20060424

Low dose pharmaceutical dosage form comprising nimesulide or its pharmaceutically acceptable salts, esters, solvates or hydrates thereof, along with one or more pharmaceutically acceptable excipient(s) for once- or twice-a-day administration are provided. The present invention also provides process of preparing such dosage forms and therapeutic methods of using such dosage forms. The low dose compns. are designed to exhibit bioavailability with reduced side effects, which is effective in the treatment of NSAID indicated disorders particularly, which require long-term treatment regimens such as arthritis. Such compns. reduce the cost of therapy in diseases, which require long-term therapies, are easy to manufacture, and also result in the reduction of dose related side effects associated with nimesulide therapy. Thus, tablets containing nimesulide 75.0 mg, microcryst. cellulose 285.0 mg, lactose 100.0 mq, croscarmellose sodium 20.0 mq, hydrogenated castor oil 7.5 mq, talc 7.5 mg, and colloidal silica 7.5 mg were prepared by wet granulation using iso-Pr alc. and compression.

тт 57-55-6, Propylene glycol, biological studies 57-55-6D,

Propylene glycol, C8-10 diesters

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (low-dose nimesulide compns. optionally in combination with other agents for treatment of inflammation and related disorders)

57-55-6 HCAPLUS CN

1,2-Propanediol (CA INDEX NAME)

OH

H3C-CH-CH2-OH

RN 57-55-6 HCAPLUS

CN 1,2-Propanediol (CA INDEX NAME)

OH

HaC-CH-CHo-OH

REFERENCE COUNT:

ACCESSION NUMBER:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS 6 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 16 HCAPLUS COPYRIGHT 2008 ACS on STN

2007:845664 HCAPLUS <<LOGINID::20080310>>

DOCUMENT NUMBER: 147:220080 TITLE:

Novel oral pharmaceutical compositions for poorly

absorbable drugs comprising adsorbents,

bioadhesive polymers, and permeation enhancers Jain, Rajesh; Jindal, Kour Chand; Devarajan, Sampath INVENTOR(S):

Kumar

PATENT ASSIGNEE(S): Panacea Biotec Ltd., India

SOURCE: PCT Int. Appl., 41pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

10747742

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

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PATENT NO.
                     KIND DATE APPLICATION NO. DATE
                        A2 20070802 WO 2007-IN29
    WO 2007086078
                                                                  20070129
    WO 2007086078
                        A.3
                              20071213
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
            CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
            GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN,
            KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK,
            MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO,
            RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT,
            TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
        RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
            IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
            CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
            GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA
                                           IN 2006-DE242
                                                             A 20060130
PRIORITY APPLN. INFO.:
    Novel oral pharmaceutical compns. comprising (i) at least one active
    agent(s) or its pharmaceutically acceptable salts, polymorphs,
    solvates, hydrates, analogs, enantiomers, tautomeric forms or
    mixts, thereof; (ii) at least one permeation enhancer(s); (iii) at least
    one adsorbent(s), (iv) at least one bioadhesive polymer(s); (v) optionally
    at least one acid soluble polymer(s), and (vi) optionally one or more other
    pharmaceutically acceptable excipient(s) are provided. The active agents
    exhibit poor or incomplete absorption, are preferably absorbed from the
    upper part of the gastrointestinal tract, and/or exhibit dissoln. rate
    with limited gastrointestinal absorption. The compns. particularly target
    the absorption window of the active agent(s) delivering the active agent
    at the absorption site preferably over an extended period of time to
    enhance their bioavailability. Preferably the compns. are in the
    gastro-adhesive modified release form and/or fast disintegrating dosage
    form which release the active agent(s) over an extended period of time.
    Also provided are processes of preparation of such novel compns. and methods of
    using them. Thus, tablets were prepared comprising (a) a core composition containing
    amoxicillin trihydrate 500.0, glyceryl monocaprylate 60.0, microcryst.
    cellulose (Avicel PH 102) 100.0, sodium alginate 100.0, hydroxypropyl Me
    cellulose 50.0, anhydrous lactose (Pharmatose DCL 21) 42.3, and magnesium
    stearate 5.0, (b) a coating composition containing Eudragit E100 85.5, triacetin
    8.5, talc 37.7, isopropanol as needed, and acetone as needed, and (c) an
    extragranular composition containing calcium CM-cellulose 100.0, Avicel PH 102
    100.0, and magnesium stearate 10.0 mg, resp. The cores, prepared by dry
    granulation, were coated, mixed with the extragranular composition and
    compressed into tablets.
    57-55-6, Propylene glycol, biological studies
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (oral pharmaceutical compns. for poorly absorbable drugs
       comprising adsorbent, bioadhesive polymer and permeation enhancers)
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TT

RN 57-55-6 HCAPLUS

CN 1,2-Propanediol (CA INDEX NAME)

OH

H3C-CH-CH2-OH

L13 ANSWER 3 OF 16 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: DOCUMENT NUMBER:

TITLE:

INVENTOR(S): PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

2007:618382 HCAPLUS <<LOGINID::20080310>> 147:57851

Mixtures comprising anthranilic acid amides and antidandruff agents as cosmetic and pharmaceutical compositions for alleviating itching

Schmaus, Gerhard; Roeding, Joachim Symrise G.m.b.H. & Co. K.-G., Germany

PCT Int. Appl., 70pp. CODEN: PIXXD2 Patent

English

PAT	ENT	NO.			KIN	D	DATE APPLICATION NO.								DATE			
WO	2007	0629	57		A1	_	2007	0607		WO 2	006-	EP68	077		20061103			
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,	
		CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
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		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	GH,	
		GM,	KE,	LS,	MW,	ΜZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,	
		KG,	KZ,	MD,	RU,	TJ,	TM											
RITY APPLN. INFO.:										US 2	005-	7406	90P		P 2	0051	130	

PRIORITY APPLN. INFO .: MARPAT 147:57851 OTHER SOURCE(S):

GI

AB The invention relates to a mixture comprising or consisting of (a) one or more compds. of Formula I (R1, R2 = H or together form another bond; R3 = H, alkyl; X, Y = OH, O-alkyl, O-acyl; m = 0-3; n, p = 0-2) or cosmetically or pharmaceutically acceptable salts and solvates thereof, and (b) one or more antidandruff agents. Thus, a shampoo formulation containing 0.2% antidandruff compound climbazole and 0.05% the itch-alleviating compound dihydroavenanthramide D showed better efficacy in reducing scalp itching in subjects compared to a shampoo containing antidandruff compound only. After 42 days, the intensity of itching could be reduced from 4.1 to a value of 2.4 on the itching scale of 1 to 6.

57-55-6, Propylene glycol, biological studies IT

RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);

(compns. comprising mixts. of anthranilic acid amides and antidandruff agents for alleviating itching)

RN 57-55-6 HCAPLUS

1,2-Propanediol (CA INDEX NAME)

OH H3C-CH-CH2-OH

REFERENCE COUNT:

THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS 9 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 4 OF 16 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:63611 HCAPLUS <<LOGINID::20080310>> 146:148846

DOCUMENT NUMBER:

TITLE: Pharmaceutical propylene glycol solvate

compositions and method for preparation thereof INVENTOR(S): Tawa, Mark; Almarsson, Orn; Remenar, Julius

PATENT ASSIGNEE(S): Transform Pharmaceuticals, Inc., USA

U.S. Pat. Appl. Publ., 33pp., Cont.-in-part of Appl. SOURCE: No. PCT/US03/41273.

CODEN: USXXCO DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 18 PATENT INFORMATION:

PA:	CENT I	NO.					APPLICATION NO.										
	2007			A1		2007	0118	US	2003	-74	77	42		2	0031		
	6559					2003			2002								
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	6699					2004											
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US						2004		US	2003	-44	931	07		2	0030	530	
	7078					2006								_			
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	2004					2004	0318	US	2003	-63	/8.	29		2	0030	808	
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            NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ,
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                         A2
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    WO 2004089313
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        SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
            TD, TG
                                           ZA 2004-7377
     ZA 2004007377
                         Α
                                20051004
                                                                  20040914
    US 2006140985
                         A1
                                20060629
                                           US 2005-541703
                                                                  20050708
PRIORITY APPLN. INFO.:
                                           US 2002-356764P
                                                               Ρ
                                                                  20020215
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                                           US 2002-232589
                                                               A1 20020903
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                                                                  20021114
                                           US 2002-427086P
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                                           US 2002-295995
                                                               A3 20021118
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                                                               Ρ
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                                           US 2003-463962P
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                                           US 2003-449307
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                                           US 2003-486713P
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                                                                  20030711
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                                                               P 20030711
                                           US 2003-637829
                                                               A2 20030808
                                           WO 2003-US27772
                                                               A2 20030904
                                           US 2003-660202
                                                               A2 20030911
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Roy P. Issac Page 36

WO 2003-US41273

US 2003-439283P

A2 20031224

P 20030110

> WO 2003-US28982 A2 20030916 A 20031229 US 2003-747742 WO 2003-US41642 A 20031229 WO 2004-US400 W 20040108 WO 2004-US6288 A 20040226 US 2004-548343P P 20040227

AB The present invention provides a pharmaceutical composition comprising a

propylene glycol solvate of a drug which is hygroscopic or has

low aqueous solubility It has surprisingly been found that by using propylene

glycol to form a solvate of a hygroscopic drug, the

hygroscopicity of the drug is decreased and/or the stability and agueous solubility is increased. The drug is therefore much easier to formulate and store

than its counterpart untreated or hydrated form. 57-55-6, Propylene glycol, biological studies

IT RL: RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)

(pharmaceutical propylene glycol solvate compns. and method

for preparation thereof)

RN 57-55-6 HCAPLUS CN

1,2-Propanediol (CA INDEX NAME)

OH

H3C-СH-СH2-ОН

L13 ANSWER 5 OF 16 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:1251802 HCAPLUS <<LOGINID::20080310>>

DOCUMENT NUMBER: 146:33009

TITLE: Injections containing COX II inhibitors and NSAID for

analgesic and antiinflammatory action

INVENTOR(S): Jain, Rajesh; Jindal, Kour Chand; Singh, Sukhjeet;

Boldhane, Sanjay

PATENT ASSIGNEE(S): Panacea Biotec Ltd., India SOURCE: PCT Int. Appl., 33pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent.

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAI	ENT	NO.			KIN	D	DATE			APPL	ICAT	ION I	NO.		D.	ATE	
						-									-		
WO	2006	1262	14		A2		2006	1130	1	WO 2	006-	IN17	7		2	0060	525
WO	2006	1262	14		A3		2007	0607									
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		CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	GH,
		GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
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IN	2005	DE01	357		A		2006	1208		IN 2	005-	DE13	57		2	0050	527
ΑU	2006	2507	65		A1		2006	1130		AU 2	006-	2507	65		2	0060	525

CA 2609242 A1 20061130 CA 2006-2609242 20060525 KR 2008016689 А 20080221 KR 2007-730585 20071227 PRIORITY APPLN. INFO .: IN 2005-DE1357 A 20050527 WO 2006-TN177 W 20060525

Novel and highly stable injectable pharmaceutical compns. comprising at least one cyclooxygenase-II enzyme (COX-II) inhibitor or non-steroidal anti-inflammatory drug (NSAID) or COX/LOX inhibitor, or its tautomeric forms, analogs, isomers, polymorphs, solvates, prodrugs or salts thereof as active ingredient suitable for parenteral administration preferably by i.m. or i.v. route; process of preparing such compns. and therapeutic methods of using such compns. are provided. The analgesic and anti-inflammatory injectable compns. of the present invention are very useful in mammals particularly in humans for the treatment of acute painful conditions like one or more of post-operative trauma, pain associated with cancer, sports injuries, migraine headache, neurol. pain and pain associated with sciatica and spondylitis, and the like, and/or chronic painful conditions, and/or a variety of painful and inflammatory conditions like postoperative pain, primary dysmenorrhea and painful osteoarthritis, and/or other associated disorders such as inflammation, fever, allergy, or the like. For example, injections contained nimesulide, PEG, propylene glycol, glycine and sodium hydroxide. 57-55-6, Propylene glycol, biological studies

тт RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (injections containing COX II inhibitors and NSAID for analgesic and

antiinflammatory action) 57-55-6 HCAPLUS RN

CN 1,2-Propanediol (CA INDEX NAME)

OH

INVENTOR(S):

SOURCE:

H3C-CH-CH2-OH

L13 ANSWER 6 OF 16 HCAPLUS COPYRIGHT 2008 ACS on STN

2006:844631 HCAPLUS <<LOGINID::20080310>> ACCESSION NUMBER:

DOCUMENT NUMBER: 145:256166

TITLE: Transmucosal administration of drug compositions for

treating and preventing disorders in animals Heit, Mark; Benitz, Antonio; Steadman, Dennis;

Petrick, David

Velcera Pharmaceuticals, USA; Novadel Pharma, Inc.

PCT Int. Appl., 128pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT ASSIGNEE(S):

PATENT NO			KIN	D -	DATE			APPL	ICAT	ION	NO.		D	ATE	
WO 200608			A2 A3		2006 2007			WO 2	006-	US55	75		2	0060:	217
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                                            AU 2006-214166
    AU 2006214166
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                                20060824
                                                                    20060217
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                                20060824
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     EP 1848270
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                                            EP 2006-735301
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             BA, HR, MK, YU
PRIORITY APPLN. INFO.:
                                            US 2005-653964P
                                            US 2005-661920P
                                                                 P 20050316
                                            US 2005-664181P
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                                            US 2005-664183P
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                                            US 2005-664938P
                                                                P 20050325
                                            US 2005-664939P
                                                                P 20050325
                                            US 2005-665525P
                                                                P 20050328
                                                                P 20050411
                                            US 2005-669888P
                                            US 2005-670651P
                                                                P 20050413
                                            US 2005-693942P
                                                                P 20050627
                                            WO 2006-US5575
                                                                W 20060217
    The invention includes compns. for transmucosal administration to an
     animal comprising at least one active agent and a pharmaceutically
     acceptable carrier. A preferred active agent is selected from the group
     consisting of meloxicam, carprofen, enrofloxacin, clemastine,
     diphenhydramine, digoxin, levothyroxine, cyclosporine, ondansetron,
     lysine, zolpidem, propofol, nitenpyram, ivermectin, milbemycin, and
     pharmaceutically acceptable salts, solvates and esters thereof.
     In another embodiment, the invention includes methods of treating or
     preventing a condition in an animal comprising transmucosally
     administering a composition comprising a therapeutically or prophylactically
     effective amount of an active agent and a pharmaceutically acceptable
     carrier. For example, composition was prepared containing meloxicam 4.67 mg, boric
     acid 0.77 mg, potassium chloride 0.93 mg, polyvinyl alc. 5 mg, Et alc. 150
    mg, sodium hydroxide 1.08 mg and water 837.57.
     57-55-6, Propylene glycol, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (transmucosal administration of drug compns. for treating and
       preventing disorders in animals)
     57-55-6 HCAPLUS
     1,2-Propanediol (CA INDEX NAME)
    OH
н<sub>3</sub>C- Сн- Сн<sub>2</sub>- Он
                         2006:608688 HCAPLUS <<LOGINID::20080310>>
                         145:70090
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AB

IT

RN

CN

SOURCE:

Roy P. Issac

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L13 ANSWER 7 OF 16 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:
DOCUMENT NUMBER:
TITLE:
                         Polymorphic forms of levosalbutamol and pharmaceutical
                         compositions containing them
INVENTOR(S):
                         Lulla, Amar; Malhotra, Geena; Rao, Dharmaraj
                         Ramchandra; Kankan, Rajendra Narayanrao; Chaudhary,
PATENT ASSIGNEE(S):
                        Cipla Limited, India; Turner, Craig Robert
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PCT Int. Appl., 64 pp.

Page 39

CODEN: PIXXD2 Patent English

FAMILY ACC. NUM. COUNT:

DOCUMENT TYPE:

LANGUAGE:

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WO	2006	0642	83		A1		2006	0622		WO 2	005-	GB49.	35		2	0051	219
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		ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,
							NZ,										
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					ZM,												
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	0005				RU,					0	005	0.4.5.0	0.77			0051	0.1.0
	2005 2591									CA 2							
	2006																
	1828																
ы		AT,															
							LV.										10,
TN	2006									IN 2							515
MX	2007	0737	8		A		2007	0814		MX 2	007-	7378			2	0070	618
KR	2007	1007	35		A		2007	1011		KR 2	007-	7160	00		2	0070	713
CN	2007 1011	2419	8		A		2008	0213		CN 2	005-	8004	8439		2	0070	817
ORIT	Y APP	LN.	INFO	. :						IN 2	004-1	MU13	56		A 2	0041	217
										IN 2	005-1	MU40			A 2	0050	114
										IN 2							
										WO 2	005-						219

AB The invention provides 3 polymorphic forms of crystalline levosalbutamol sulfate designated herein as Forms (I), (II) and (III). The above crystalline levosalbutamol sulfate Forms are characterized by a powder XRD pattern. Processes for making the new polymorphic forms and pharmaceutical compns. comprising them are also provided. A pharmaceutical composition comprises a therapeutically effective isomer of salbutamol or a salt, solvate , ester, derivative or polymorph thereof, a glucocorticoid and a carrier or excipient and optionally one or more other therapeutic agents. Preferably the composition is an aerosol formulation comprising the drugs, a propellant and one or more other ingredients, such as a surfactant, cosolvent, or bulking agent. Alternatively, DPI or inhalation suspensions may be used. Thus, an inhalant formulation contained levosalbutamol sulfate 10.08 and fluticasone propionate 8.24 mg, and Propellant-227 g. 57-55-6, 1,2-Propanediol, biological studies IT RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (polymorphic forms of levosalbutamol and pharmaceutical compns. containing them)

RN 57-55-6 HCAPLUS

CN 1,2-Propanediol (CA INDEX NAME)

ОН | Н3С-СН-СН2-ОН

REFERENCE COUNT:

THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS
RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 8 OF 16 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1049848 HCAPLUS <<LOGINID::20080310>>

DOCUMENT NUMBER: 143:353332

TITLE: Preparation of novel pharmaceutical forms

INVENTOR(S): Hickey, Magali Bourghol; Peterson, Matthew; Almarsson,
Orn; Zaworotko, Michael J.; Shattock, Tanise; McMahon,
Jennifer; Bis, Joanna; Remenar, Julius; Tawa, Mark

PATENT ASSIGNEE(S): Transform Pharmaceuticals, Inc., USA SOURCE: PCT Int. Appl., 66 pp.

SOURCE: PCT Int. Appl., 66 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

	FENT				KIN	D	DATE			APPI	LICAT	ION	NO.		_	ATE		
WO	2005	0895	11		A2		2005	0929		WO 2	2005-	US93	05			0050		
WO	2005				A3		2007											
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		CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,	
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	, JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,	
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	sc,	SD,	SE,	SG,	SK,	SL,	SM,	
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	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	, SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	
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PRIORITY	Y APP	LN.	INFO	. :						US 2	2004-	5548	34P		P 2	0040	319	
										US 2	2004-	5666	47P		P 2	0040	430	
										US 2	2004-	6102	96P		P 2	0040	916	
										US 2	2004-	6379	07P		P 2	0041	221	

AB Crystalline salts, polymorphs, solvates, and hydrates of bicalutamide, 5-fluorouracil, donepezil, anastrozole, nelfinavir, mirtazapine, lansoprazole, and tamaulosin, or derivs. thereof are provided by the subject invention. Methods of making and using the same are also provided. Thus, donepezil and nicotinamide were dissolved in EtOH and

excess of water to give donepezil tetrahydrate. IT 57-55-6, Propylene glycol, uses

RL: NUU (Other use, unclassified); USES (Uses) (preparation of novel pharmaceutical forms)

RN 57-55-6 HCAPLUS

1,2-Propanediol (CA INDEX NAME)

ОН

H3C-CH-CH2-OH

L13 ANSWER 9 OF 16 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:98819 HCAPLUS <<LOGINID::20080310>>
DOCUMENT NUMBER: 142:198250

TITLE: Medicaments for inhalation comprising an anticholinergic and a betamimetic

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INVENTOR(S):
                         Meade, Christopher John Montague; Pairet, Michel;
                         Pieper, Michael P.; Konetzki, Ingo
PATENT ASSIGNEE(S):
                         Boehringer Ingelheim International G.m.b.H., Germany
SOURCE:
                         U.S. Pat. Appl. Publ., 33 pp.
                         CODEN: USXXCO
DOCUMENT TYPE:
                         Patent
                         English
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LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

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US	2005 2534	0257	18				2005 2005	0203			004-	8915	64		2	0040	715
WO	2005	0139	94		A1		2005	0217		WO 2	004 - 3	EP80	13		2	0040	717
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		CN.	co,	CR.	CU,	CZ,	DE,	DK,	DM,	DZ.	EC,	EE,	EG,	ES,	FI.	GB,	GD,
		GE.	GH.	GM.	HR.	HU.	ID,	IL.	IN.	IS.	JP.	KE.	KG.	KP.	KR.	KZ.	LC.
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							PL,										
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EP	1651				A 1		2006	0503		EP 2	004-	7411	23		2	0040	717
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INIONII.	TORTIT ALTEN: INFO									US 2						0031	
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OTHER SO	שמשוור	(2) •			CAS	DEAC	т 14	2 + 1 9								0040	, 1 ,

OTHER SOURCE(S): GT

CASREACT 142:198250; MARPAT 142:198250

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

A pharmaceutical composition comprising an anticholinergic, e.g., tropium salt I·X- (X = anion of single neg. charge; F, Cl, Br, I, sulfate, phosphate, SO3Me, NO3, maleate, OAc, citrate, fumarate, tartrate, oxalate, succinate, OBz, SO3C6H4Me-4; optionally as racemates, enantiomers, solvates and/or hydrates), quaternary ammonium salt II·X-[R = Me, Et], or alkaloid salt III · X- [A = bond, O, CH2, H2; R1, R2 = Me, Et, CH2Et, CHMe2 (optionally substituted by OH, F); R3, R4, R5, R6 = H, Me, Et, OMe, OEt, OH, F, Cl, Br, CN, CF3, NO2; R7 = H, Me, Et, OMe, OEt, CH2F, CH2CH2F, OCH2F, OCH2CH2F, CH2OH, CH2CH2OH, CF3, CH2OMe, CH2CH2OMe, CH2OEt, CH2CH2OEt, OAc, OC(:0)Et, OC(:0)CF3, F, Cl, Br], and a betamimetic, e.g., quinolone IV or its enantiomers, optionally together with a pharmaceutically acceptable excipient, the anticholinergic and the betamimetic optionally in the form of their enantiomers, mixts. of their enantiomers, their racemates, their solvates, or their hydrates, processes for preparing them, and their use in the treatment of asthma, COPD, or other inflammatory or obstructive respiratory complaints. TT 57-55-6, Propylene glycol, uses

RL: NUU (Other use, unclassified); USES (Uses)

(inhalant co-solvent; pharmaceutical composition for inhalation comprising anticholinergic and betamimetic)

RN 57-55-6 HCAPLUS

CN 1,2-Propanediol (CA INDEX NAME)

ОН

H3C-CH-CH2-OH

L13 ANSWER 10 OF 16 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:589401 HCAPLUS <<LOGINID::20080310>>
DOCUMENT NUMBER: 141:128859

TITLE: Pharmaceutical propylene glycol solvate

compositions
INVENTOR(S): Tawa, Mark; Almarsson, Oern; Remenar, Julius

PATENT ASSIGNEE(S): Transform Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 317 pp. CODEN: PIXXD2

18

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PA:	TENT	NO.			KIN	D	DATE			APPL	ICAT	ION	NO.		D	ATE		
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     US 2006140985
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                                                                     20050929
                          A1
                                 20061005
                                             US 2002-232589
PRIORITY APPLN. INFO.:
                                                                  A 20020903
                                             US 2002-437516P
                                                                 P 20021230
                                             US 2003-441335P
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                                             US 2003-456027P
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                                             US 2003-456608P
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                                             US 2003-601092
                                                                 A 20030620
                                             WO 2003-US19574
                                                                 A 20030620
                                             US 2003-486713P
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                                             WO 2003-US28982
                                                                 A 20030916
                                             WO 2003-US41273
                                                                 A 20031224
                                             US 2002-356764P
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                                             US 2002-360768P
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                                             US 2002-380288P
                                             US 2002-384152P
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                                             US 2002-390881P
                                                                 P 20020621
                                                                 P 20020830
                                             US 2002-406974P
                                             US 2002-412459P
                                                                 P 20020920
                                             US 2002-426275P
                                                                 P 20021114
                                             US 2002-427086P
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                                             US 2002-295995
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                                             US 2002-428515P
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                                             US 2002-429515P
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                                             US 2003-439282P
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                                             US 2003-439283P
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                                             US 2003-444315P
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                                             US 2003-451213P
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                                             US 2003-463962P
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                                             US 2003-487064P
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                                                                     20030711
                                                                 A 20030808
                                             US 2003-637829
                                                                 A2 20030904
                                             WO 2003-US27772
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Roy P. Issac Page 44

US 2003-660202

A2 20030911

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US 2003-747742 A1 20031229
US 2004-747742 A1 20031229
WO 2003-05341642 A 20031229
WO 2004-US6406 W 20041028
WO 2004-US6408 A 2004028
US 2004-548343P P 20040227
WO 2004-US9947 W 20040331
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AB The invention relates to pharmaceutical compns. comprising propylene glycol solvates of active pharmaceutical ingredients (APIs) which are hygroscopic or has low aqueous solubility. The composition comprises solvate characterized by (i) the mole ratio of propylene glycol to API in the range of 0.25 to 2; (ii) a crystalline form, (iii) a powder X-ray diffraction spectrum which differs from the corresponding powder X-ray diffraction spectrum of the unsolvated API by at least one property, (iv) stability to temps. of up to 50° under a stream of gas in a thermogravimetric anal. apparatus, (v) the API is optionally in the form of a metal salt, such as an alkali or an alkaline earth metal salt, (vi) the API has low aqueous solubility and is selected from steroid drugs, and (vii) the composition further comprises a pharmaceutically-acceptable diluent, excipient or carrier. A method for preparing a propylene glycol solvate of an API comprises (a) contacting propylene glycol with an API in solution, (b) crystallizing a propylene glycol solvate of the API from the solution, and (c) isolating the solvate. For example, to a solution of celecoxib (253 mg, 0.664 mmol) in di-Et ether (6 mL) was added propylene glycol (0.075 mL, 102 mmol). To the clear solution was added potassium t-butoxide in THF (1 M, 0.66 mL, 0.66 mmol). Crystals immediately began to form and after 5 min the solid had completely crystallized The crystalline salt form was found to be a 1:1 propylene glycol solvate of celecoxib potassium salt.

IT 57-55-6, Propylene glycol, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation and compns. of propylene glycol solvates with

hygroscopic or low soluble drugs)

RN 57-55-6 HCAPLUS

CN 1,2-Propanediol (CA INDEX NAME)

OH

H3C-CH-CH2-OH

L13 ANSWER 11 OF 16 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:837083 HCAPLUS <<LOGINID::20080310>>

DOCUMENT NUMBER: 139:341650

TITLE: Medicaments containing betamimetic drugs and a novel anticholinesterase drug for treating

respiratory tract diseases

INVENTOR(S): Banholzer, Rolf; Meade, Christopher John Montague;
Meissner, Helmut; Morschhaeuser, Gerd; Pairet, Michel;

Pieper, Michael P.; Pohl, Gerald; Reichl, Richard;

Speck, Georg; Konetzki, Ingo

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma G.m.b.H. & Co. K.-G.,

Germany

SOURCE: PCT Int. Appl., 45 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

GΙ

	TENT	NO.			KIN	0	DATE			APE	LICAT	ION	NO.			DATE	
											2003-					20030	
	W:										BG,						
											EE,						
		GM.	HR,	HU,	ID,	IL.	IN.	IS.	JP,	KE	KG,	KP.	KR,	KZ.	LC	LK.	LR,
											, MW,						
		PH.	PL,	PT,	RO,	RU,	SC.	SD,	SE,	SC	S, SK,	SL,	TJ.	TM,	TN	TR,	TT,
		TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZI	, ZM,	ZW					
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ	, TZ,	UG,	ZM,	ZW,	AM	, AZ,	BY,
		KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BO	CH,	CY,	CZ,	DE,	DK	, EE,	ES,
		FI,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC	, NL,	PT,	RO,	SE,	SI	, SK,	TR,
		BF,	BJ,	CF,	CG,	CI,	CM,	GA,	GN,	GC	Q, GW,	ML,	MR,	NE,	SN	, TD,	TG
DE	1025	6317			A1		2003	1023		DE	2002-	1025	6317			20021	203
US	2004	0100	03		A1		2004	0115		US	2003-	3955	01			20030	324
CA	2481	468			A1		2003	1023		CA	2003-	2481	468			20030	409
AU	2003	2322	01		A1		2003	1027		AU	2003-	2322	01			20030	409
EP	US 2004010003 CA 2481468 AU 2003232201 EP 1497289 EP 1497289				A1		2005	0119		EP	2003-	7461	58			20030	409
EP	1497	289			В1		2005	0824									
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GF	₹, IT,	LI,	LU,	NL,	SE	, MC,	PT,
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	ΑI	, TR,	BG,	CZ,	EE,	HU	, SK	
BR	2003	0091	85		A		2005	0215		BR	2003-	9185				20030	409
CN	1646	527			A		2005	0727		CN	2003-	8083	30			20030	409
AT	3027	74			T		2005	0915		ΑT	2003-	7461	58			20030	409
JP	2005	5291	11		T		2005	0929		JΡ	2003-	5840	53			20030	409
EP	1586	574			A1		2005	1019		ΕP	2003- 2003- 2003- 2003- 2005-	1070	8			20030	409
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GF	R, IT,	LI,	LU,	NL,	SE	, MC,	PT,
		ΙE,	SI,	LT,	LV,	FΙ,	RO,	MK,	CY,	ΑI	, TR,	BG,	CZ,	EE,	HU	, SK	
PT	1497	289			T		2005	1130		PT	2003-	7461	58			20030	409
ES	2248	767			Т3		2006	0316		ES	2003-	7461	58			20030	409
NZ	5363	37			A		2007	0531		NZ	2003-	5363	37			20030	409
ZA	2004	0068	81		A		2006	0628		ZA	2004-	6881				20040	830
NO	2004	0041	07		A		2004	1104		ИО	2004-	4107				20040	927
IN	2004	DN 0 2 9	916		A		2007	0413		IN	2004-	DN29	16			20040	928
MX	2004	PA099	916		A		2005	0503		MX	2004-	PA99	16			20041	008
IORIT:	Y APP	LN.	INFO	.:						DΕ	2003- 2003- 2003- 2004- 2004- 2004- 2004- 2004- 2004- 2004-	1021	6428		Α.	20020	412
										US	2002- 2003- 2003-	3861	60P		Ρ.	20020	605
										EΡ	2003-	7461	58		А3	20030	409
										WO	2003-	EP36	69		W.	20030	409
THER SO	DURCE	(S):			MARI	PAT	139:	3416	5 O								

^{*} STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention relates to novel medicament compns. based on long-acting $\beta 2$ agonists and salts I·X- [X = simple anion (Cl, Br, I, sulfate, phosphate, 035Me, NO3, maleate, 0Ac, citrate, fumarate, tartrate, oxalate, succinate, 02CPh, OTs)], of a novel anticholinesterase drug I, to methods for the production of these compns. and their use in treating respiratory tract diseases. The invention also relates to the combination of I with one or more biomimetics II [R], R2 = H, Cl-4-alkyl; R3, R4 = H, Cl-4-alkyl, O-(Cl-4-alkyl), (Cl-4-alkylene)-O-(Cl-4-alkyl); R3R4 = Cl-4-alkylene, O-(Cl-4-alkylene)-O), their enantiomers, mixts., racemates, solvates, hydrates or with salmeterol, formoterol or their acid addition salts. Thus, an example inhalation powder formulation comprises I-Br- and II-HOZCCHICHCOZOH-(Z) (R1 = R2 = H, R3 = R4 = Et)

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and lactose.
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57-55-6, Propylene glycol, uses

RL: NUU (Other use, unclassified); USES (Uses) (inhalant co-solvent; medicaments containing betamimetic drugs

and a novel anticholinesterase drug for treating respiratory tract diseases)

RM 57-55-6 HCAPLUS

CN 1,2-Propanediol (CA INDEX NAME)

OH

H3C-CH-CH2-OH

REFERENCE COUNT:

3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 12 OF 16 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:923625 HCAPLUS <<LOGINID::20080310>>

DOCUMENT NUMBER: 136:58810

TITLE: Pharmaceutical anti-inflammatory aerosol formulation containing a hydrofluoroalkane propellant

INVENTOR(S): Armour, Duncan Robert; Brown, David; Congreve, Miles

Stuart; Gore, Paul Martin; Green, Darren Victor Steven; Holman, Stuart; Jack, Torquil Iain MacLean; Mason, Andrew McMurtrie; Morriss, Karen; Ramsden, Nigel Grahame; Thomas, Marian; Ward, Peter

Glaxo Group Limited, UK; et al.

PATENT ASSIGNEE(S): SOURCE: PCT Int. Appl., 21 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Pat.ent. LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PA:	TENT	NO.			KIN	D	DATE			APPL	ICAT	ION I	NO.		D.	ATE	
						-									-		
WO	2001	0959.	25		A1		2001	1220		WO 2	001-	GB26	13		2	0010	615
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,
		HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,	LS,
		LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,	RO,
		RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,
		VN,	YU,	ZA,	ZW,	AM,	AZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM			
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,
		BJ,	CF,	CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG		
EP	1289	539			A1		2003	0312		EP 2	001-	9384	35		2	0010	615
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR						
JP	2004	5035	05		T		2004	0205		JP 2	002-	5101	03		2	0010	615
PRIORIT:	Y APP	LN.	INFO	. :						GB 2	000-	1488	1	2	A 2	0000	616
										WO 2	001-	GB26	13	1	v 2	0010	615

AB The present invention relates to a pharmaceutical aerosol formulation comprising a hydrofluoroalkane (HFA) propellant having dissolved therein particulate (2S)-3-[4-({[4-(aminocarbonyl)-1-piperidinyl]carbonyl}oxy)phen y1]-2-[((2S)-4-met y1-2-{[2-(2-methylphenoxy)acety1]amino}pentanoy1)amino] propanoic acid (I) or a salt or solvate thereof. Methods and uses of the formulation in the treatment of respiratory disorders are also described, as are canisters and metered dose inhalers containing said

formulation. For example, I was prepared, formulated as aerosol containing 1% I, 10% ethanol, and 1,1,1,2-tetrafluoroethane up to 100% (by weight), and the formulation was filled into an aluminum canister, to obtain a metered dose inhaler with about 120 actuations.

57-55-6, Propylene glycol, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(preparation and aerosol formulation of anti-inflammatory leucyl-tyrosine derivative for treatment of respiratory disorders)

RN 57-55-6 HCAPLUS

1,2-Propanediol (CA INDEX NAME) CN

OH

H3C-CH-CH2-OH

REFERENCE COUNT:

1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 13 OF 16 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:747580 HCAPLUS <<LOGINID::20080310>>

DOCUMENT NUMBER: 135:278052

TITLE: Oily compositions containing highly fat-soluble

INVENTOR(S): Nishihara, Yoshitaka; Kinoshita, Haruki; Yoshikawa,

Takayoshi PATENT ASSIGNEE(S):

Shionogi & Co., Ltd., Japan SOURCE: PCT Int. Appl., 50 pp.

CODEN: PIXXD2 DOCUMENT TYPE: Pat.ent.

LANGUAGE: Japanese FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA:	TENT	NO.			KIN		DATE					TION				ATE	
WO	2001	0743	31		A1											20010	329
	W:	AE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BE	, BG	, BR,	BY,	BZ,	CA,	CH,	CN,
		co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE	, ES	, FI,	GB,	GD,	GE,	GH,	GM,
		HR.	HU.	ID,	IL.	IN.	IS.	JP.	KE,	KG	, KR	, KZ,	LC.	LK.	LR.	LS.	LT.
												, NO,					
												, TZ,					
		YU,	ZA,	ZW													
	RW:	GH.	GM.	KE.	LS.	MW.	MZ.	SD.	SL.	SZ	. TZ	, UG,	ZW.	AT.	BE.	CH.	CY.
												, MC,					
		BJ,	CF.	CG,	CI,	CM,	GA,	GN,	GW,	MI	, MR	, NE,	SN,	TD,	TG		
AU	2001	0446	14		A		2001	1015		ΑU	2001	-4461	4		2	20010	329
CA	2404	381			A1		2002	0926		CA	2001	-2404	381		- 2	20010	329
EP	1273	287			A1		2003	0108		EΡ	2001	-9175	89		- 2	0010	329
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GF	, IT	, LI,	LU,	NL,	SE,	MC,	PT,
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AI	, TR						
JP	3831	253			B2		2006	1011		JP	2001	-5720	76		2	20010	329
MX	2002	PA09	763		A		2003	0327		MX	2002	-PA97	63		2	20021	003
US	2003	1490	61		A1		2003	0807		US	2002	-2406	02		2	20021	003
PRIORIT:	Y APP	LN.	INFO	. :						JΡ	2000	-1022	72		A 2	20000	404
										WO	2001	-JP26	21		W 2	20010	329
OTHER S	DURCE	(S):			MAR	PAT	135:	2780	52								

Disclosed are oily compns. which contain as the principal agent highly fat-soluble drugs, pharmaceutically acceptable salts and solvates thereof and further contain (1) a triester of glycerol

with a medium-chain fatty acid and/or an ester of propylene glycol with a medium-chain fatty acid, (2) a triester of glycerol with a long-chain fatty acid, and (3) a surfactant. An emulsion contained 3''-fluoro-2',3',5',6'-tetramethy1-N-(3-methy1-2-buteny1)-4''-[(3-methy1-2butenyl)oxy]-[1,1':4',1''-terphenyl]-4-amine 10 %, Miglyol-812 60 %, avocado oil 10 %, and sorbitan monopalmitate 20 %.

57-55-6D, Propylene glycol, esters with medium-chain fatty acids RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (oily compns, containing highly fat-soluble drugs)

57-55-6 HCAPLUS

1,2-Propanediol (CA INDEX NAME) CN

OH

RN

H3C-CH-CH2-OH

REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 14 OF 16 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:247477 HCAPLUS <<LOGINID::20080310>> DOCUMENT NUMBER: 131:92418

TITLE:

Cyclodextrins as permeation enhancers: some theoretical evaluations and in vitro testing AUTHOR(S): Masson, Mar; Loftsson, Thorsteinn; Masson, Gisli;

Stefansson, Einar

CORPORATE SOURCE: Department of Pharmacy, University of Iceland, P.O Box

7210, Reykjavik, IS-107, Iceland

SOURCE: Journal of Controlled Release (1999), 59(1), 107-118

CODEN: JCREEC; ISSN: 0168-3659

PUBLISHER: Elsevier Science Ireland Ltd. DOCUMENT TYPE: Journal

LANGUAGE: English

It is well known that cyclodextrins can enhance the permeation of poorly soluble drugs through biol. membranes. However, the permeability will decrease if cyclodextrin is added in excess of the concentration needed to solvate the drug. The mechanism of cyclodextrin effect on drug permeability has not been fully explained. The effect of cyclodextrins cannot be explained as solely due to increased solubility of the drug in the aqueous donor phase nor can it be explained by assuming that cyclodextrins act as classical permeation enhancers, i.e. by decreasing the barrier function of the lipophilic membrane. In the present work, we modeled the effect of cyclodextrins in terms of mixed barrier consisting of both diffusion and membrane controlled diffusion, where the diffusion of the drug in the aqueous diffusion layer is significantly slower than in the bulk of the donor. This diffusion model is described by simple math. equation where the properties of the system are expressed in terms of 2 consts. PM/Kd and M1/2. Data for the permeation of hydrocortisone through hairless mouse skin in the presence of various cyclodextrins, and cyclodextrin polymer mixts., were fitted to obtain values for these 2 consts. The rise in flux with increased cyclodextrin complex concentration and fall with excess cyclodextrin was accurately predicted. Data for the permeation of drugs through a semi-permeable cellophane membrane could also be fitted to the equation. Cyclodextrins act as permeation enhancers carrying the drug through the aqueous barrier, from the bulk solution towards the lipophilic surface of biol. membranes, where the drug mols. partition from the complex into the lipophilic membrane.

57-55-6D, 1,2-Propanediol, cyclodextrin ethers, biological studies RL: BPR (Biological process); BSU (Biological study, unclassified); THU

(Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (cyclodextrins as permeation enhancers of drugs)

RN 57-55-6 HCAPLUS

CN 1,2-Propanediol (CA INDEX NAME)

OH

TITLE:

H3C-CH-CH2-OH

REFERENCE COUNT:

31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 15 OF 16 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1991:49473 HCAPLUS <<LOGINID::20080310>>

DOCUMENT NUMBER: 114 - 49473

Influence of solvent composition on the solubilities

and solid-state properties of the sodium salts of some drugs

AUTHOR(S): Rubino, Joseph T.; Thomas, Elizabeth

CORPORATE SOURCE: Sch. Pharm., Univ. North Carolina, Chapel Hill, NC, 27599-7360, USA

SOURCE: International Journal of Pharmaceutics (1990).

65(1-2), 141-5

CODEN: IJPHDE; ISSN: 0378-5173 DOCUMENT TYPE: Journal

LANGUAGE: English

The solubilities of the Na salts of some sulfonamides,

barbiturates and hydantoins were determined in mixts. of propylene glycol and water. In many cases, the solubilities of the salts in the mixed solvents were lower than those in water, however, several compds. exhibited enhanced solubilities in the mixed solvents. This unexpected increase in solubility was not related to the lipophilicity of the acidic forms of the drugs and occurred in at least one member of each group of compds. Anal. of the solid phase which had been equilibrated with each solvent indicated the formation of crystal hydrates for most of the solutes, and in at least one instance, mixed solvates. These compds. could be categorized on the basis of their desolvation temps. Those compds. with low temps, of desolvation had increased solubilities in propylene

decreased solubilities in the mixed solvents. These data indicate that crystal hydrate formation plays a significant role in determining if a cosolvent

can be used to enhance the solubilities of certain sodium salts.

glycol-water mixts, while compds, with high desolvation temps, had

IT 57-55-6, Propylene glycol, properties

RL: PRP (Properties)

(drug sodium salts solubility in aqueous solns. of)

RN 57-55-6 HCAPLUS

CN 1,2-Propanediol (CA INDEX NAME)

ОН

H3C-CH-CH2-OH

L13 ANSWER 16 OF 16 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1990:83994 HCAPLUS <<LOGINID::20080310>> DOCUMENT NUMBER: 112:83994

TITLE:

Lipid-protein-partitioning (LPP) theory of skin enhancer activity: finite dose technique

AUTHOR(S): CORPORATE SOURCE: SOURCE: Goodman, Michael; Barry, Brian W. Sch. Pharm., Univ. Bradford, Bradford, BD7 1DP, UK International Journal of Pharmaceutics (1989), 57(1), 29-40

CODEN: IJPHDE; ISSN: 0378-5173

DOCUMENT TYPE: Journal LANGUAGE: English

The effectiveness of pretreating human epidermis with a range of accelerants on the permeation of model drugs 5-fluorouracil (5FU) and estradiol (ES) was studied. To complement previous steady-state investigations with these materials, a finite dose technique with drug deposited as a dried film with accelerants Azone and decyl Me sulfoxide in both propylene glycol (PG) and water vehicles, oleic acid (OA) in PG, and PG were used. Following accelerant pretreatments, drug permeation was monitored for 4 days. All PG-based accelerants and PG promoted 5FU penetration, 2% Azone in PG by 80-fold and PG by 12-fold (24-h results quoted). Water and aqueous-based accelerants were relatively ineffective, 3% Azone with 0.1% Tween 20 in saline producing only a 3.7-fold increase. A similar trend occurred with ES; 5% OA in PG was the most effective pretreatment, yielding a 35-fold increase, and PG produced a 9-fold effect. The aqueous-based enhancers were ineffective. With the finite dose technique, PG pretreatment increased drug penetration, contrasting with its ineffectiveness in our previous steady-state work. The glycol may solvate the tissue when it is not fully hydrated, competing with drug for hydrogen-bonding sites. Addnl., PG may aid more drug to partition into the skin. The accelerants themselves, which probably disrupt the lipid bilayers, were more effective with PG rather than with water vehicles. As PG may solvate horny cells, this suggests that both drugs may permeate the stratum corneum transcellularly to some extent. The 3 features of skin penetration enhancer activity (Lipid interaction, Protein alteration and Partitioning phenomena) represent the essential aspects of the LPP theory.

IT 57-55-6, Propylene glycol, biological studies RL: BIOL (Biological study)

(penetration enhancer, skin pretreatment with, drug permeation response to, lipid-protein-partitioning theory in study of)

RN 57-55-6 HCAPLUS

1,2-Propanediol (CA INDEX NAME)

OH

H3C-CH-CH2-OH

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(FILE 'HOME' ENTERED AT 20:40:11 ON 10 MAR 2008)

FILE 'HCAPLUS' ENTERED AT 20:40:35 ON 10 MAR 2008 E US20070015841/PN 25

L1 7 S E3

FILE 'STNGUIDE' ENTERED AT 20:41:33 ON 10 MAR 2008

FILE 'REGISTRY' ENTERED AT 20:43:14 ON 10 MAR 2008
13 S 639010-33-6 OR 639010-34-7 OR 639010-35-8 OR 639010-36-9 O
15 7 S 9004-65-3 OR 9004-96-0 OR 106392-12-5 OR 162011-90-7 OR 169

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L4
              20 S L2-L3
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FILE 'HCAPLUS' ENTERED AT 20:43:48 ON 10 MAR 2008 132496 S L4

1.6 4 S L5 AND L1

FILE 'STNGUIDE' ENTERED AT 20:44:12 ON 10 MAR 2008

FILE 'HCAPLUS' ENTERED AT 20:47:58 ON 10 MAR 2008

E CELECOXIB+ALL/CT

512737 \$ (CELECOXIB OR "HEALTH PRODUCTS" OR "DRUGS" OR "ANTI-INFLAMMAT L7 E CELECOXIB+ALL/CT

555488 S (CELECOXIB OR "CYCLIC COMPOUNDS" OR "HETEROCYCLIC COMPOUNDS" L8 E CELECOXIB+ALL/CT

1.9 3288 S (CELECOXIB OR "CELECOXIB" OR "BENZENESULFONAMIDE, 4-(5-(4-MET T-10 568599 S L7-L9

E "57-55-6"/BI,RN 25 30485 S E3 OR E5 OR E6 OR E7

2399 S L10 AND L11 L12 L13 16 S L12 AND SOLVATE

FILE 'STNGUIDE' ENTERED AT 20:51:13 ON 10 MAR 2008 T.14 0 S L13 AND L5

L15 ANSWER 1 OF 8 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:1238781 HCAPLUS <<LOGINID::20080310>>

DOCUMENT NUMBER: 147:491657 TITLE:

Novel low dose pharmaceutical compositions comprising nimesulide, preparation and use thereof

Jain, Rajesh; Jindal, Kour Chand INVENTOR(S): Panacea Biotec Ltd., India PATENT ASSIGNEE(S):

SOURCE: PCT Int. Appl., 40pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA:	CENT	NO.			KIN	D	DATE			APPL	ICAT	ION I	NO.		D.	ATE	
						-											
WO	2007	1226.	37		A1		2007	1101	1	WO 2	007-	IN16	2		2	0070	423
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,
		CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,
		GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,
		KN,	KP,	KR,	ΚZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	MG,	MK,
		MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,
		RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ΤJ,	TM,	TN,	TR,	TT,
		TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW						
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		IS,	IT,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,
		BJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,
		GH,	GM,	KΕ,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,
		BY,	KG,	ΚZ,	MD,	RU,	ΤJ,	TM									
IN	2006	DE01	033		A		2008	0118		IN 2	006-	DE 10.	33		2	0060	424
RIT	Z APP	LN.	INFO	. :						IN 2	006-	DE10	33		A 2	0060	424
Los	doe	a nh	arma.	court	ical	doe	200	form	COM	nrie	ina	nima	enli.	do o	r it		

PRIC AB Low dose pharmaceutical dosage form comprising nimesulide or its pharmaceutically acceptable salts, esters, solvates or hydrates

thereof, along with one or more pharmaceutically acceptable excipient(s) for once- or twice-a-day administration are provided. The present invention also provides process of preparing such dosage forms and therapeutic methods of using such dosage forms. The low dose compns. are designed to exhibit bioavailability with reduced side effects, which is

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effective in the treatment of NSAID indicated disorders particularly,
     which require long-term treatment regimens such as arthritis. Such
     compns. reduce the cost of therapy in diseases, which require long-term
     therapies, are easy to manufacture, and also result in the reduction of dose
     related side effects associated with nimesulide therapy. Thus, tablets
     containing nimesulide 75.0 mg, microcryst. cellulose 285.0 mg, lactose 100.0
     mg, croscarmellose sodium 20.0 mg, hydrogenated castor oil 7.5 mg, talc
     7.5 mg, and colloidal silica 7.5 mg were prepared by wet granulation using
     iso-Pr alc. and compression.
     57-55-6, Propylene glycol, biological studies 57-55-6D,
     Propylene glycol, C8-10 diesters 9004-65-3, Hydroxypropyl methyl
     cellulose
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (low-dose nimesulide compns. optionally in combination with other
        agents for treatment of inflammation and related disorders)
     57-55-6 HCAPLUS
     1,2-Propanediol (CA INDEX NAME)
    OH
H3C-CH-CH2-OH
     57-55-6 HCAPLUS
     1,2-Propanediol (CA INDEX NAME)
    OH
H3C-СH-СH2-ОН
    9004-65-3 HCAPLUS
    Cellulose, 2-hydroxypropyl methyl ether (CA INDEX NAME)
    CM
         1
     CRN 9004-34-6
     CMF Unspecified
     CCI PMS, MAN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
    CM
          2
     CRN 67-56-1
     CMF C H4 O
нас-он
    CM
         3
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IT

RN

CN

RN

CN

RN

CN

CRN 57-55-6 CME C3 H8 O2

OH

H3C-CH-CH2-OH

9004-34-6, Cellulose, biological studies IT RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (microcryst.; low-dose nimesulide compns. optionally in combination with other agents for treatment of inflammation and related disorders)

RN 9004-34-6 HCAPLUS CN Cellulose (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 2 OF 8 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:845664 HCAPLUS <<LOGINID::20080310>>

DOCUMENT NUMBER: 147:220080

TITLE: Novel oral pharmaceutical compositions for poorly

absorbable drugs comprising adsorbents. bioadhesive polymers, and permeation enhancers

INVENTOR(S): Jain, Rajesh; Jindal, Kour Chand; Devarajan, Sampath

Kumar

PATENT ASSIGNEE (S): Panacea Biotec Ltd., India SOURCE: PCT Int. Appl., 41pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

	ENT !				KIN)	DATE		- 2	APPL	ICAT					ATE	
	2007				A2	-	2007	0802	,	WO 2						0070	
WO	2007	0860	78		A3		2007	1213									
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		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,
		KP,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,
		MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,
		RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	TJ,	TM,	TN,	TR,	TT,
		TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW						
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,
		IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	BJ,
		CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	GH,
		GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
		KG,	ΚZ,	MD,	RU,	TJ,	TM,	AP,	EA,	EP,	OA						
RIT	APP:	LN.	INFO	. :						IN 2	006-	DE 24.	2		A 2	0060	130

PRIO AB Novel oral pharmaceutical compns. comprising (i) at least one active

agent(s) or its pharmaceutically acceptable salts, polymorphs, solvates, hydrates, analogs, enantiomers, tautomeric forms or mixts. thereof; (ii) at least one permeation enhancer(s); (iii) at least one adsorbent(s), (iv) at least one bloadhesive polymer(s); (v) optionally at least one acid soluble polymer(s), and (vi) optionally one or more other pharmaceutically acceptable excipient(s) are provided. The active agents exhibit poor or incomplete absorption, are preferably absorbed from the upper part of the gastrointestinal tract, and/or exhibit dissoln. rate with limited gastrointestinal absorption. The compns. particularly target

the absorption window of the active agent(s) delivering the active agent

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at the absorption site preferably over an extended period of time to
     enhance their bioavailability. Preferably the compns. are in the
     gastro-adhesive modified release form and/or fast disintegrating dosage
     form which release the active agent(s) over an extended period of time.
    Also provided are processes of preparation of such novel compns. and methods of
     using them. Thus, tablets were prepared comprising (a) a core composition containing
     amoxicillin trihydrate 500.0, glyceryl monocaprylate 60.0, microcryst.
     cellulose (Avicel PH 102) 100.0, sodium alginate 100.0, hydroxypropyl Me
     cellulose 50.0, anhydrous lactose (Pharmatose DCL 21) 42.3, and magnesium
     stearate 5.0, (b) a coating composition containing Eudragit E100 85.5, triacetin
     8.5, talc 37.7, isopropanol as needed, and acetone as needed, and (c) an
     extragranular composition containing calcium CM-cellulose 100.0, Avicel PH 102
     100.0, and magnesium stearate 10.0 mg, resp. The cores, prepared by dry
     granulation, were coated, mixed with the extragranular composition and
     compressed into tablets.
     9004-34-6, Cellulose, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (microcryst.; oral pharmaceutical compns. for poorly absorbable
        drugs comprising adsorbent, bioadhesive polymer and permeation
        enhancers)
     9004-34-6 HCAPLUS
    Cellulose (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
    57-55-6, Propylene glycol, biological studies 9004-34-6D
     , Cellulose, ethers 9004-64-2, Hydroxypropyl cellulose
     9004-65-3, Hydroxypropyl methyl cellulose
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (oral pharmaceutical compns. for poorly absorbable drugs
        comprising adsorbent, bioadhesive polymer and permeation enhancers)
     57-55-6 HCAPLUS
     1.2-Propanediol (CA INDEX NAME)
    ОН
н<sub>3</sub>С-- Сн-- Сн<sub>2</sub>-- Он
     9004-34-6 HCAPLUS
    Cellulose (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
    9004-64-2 HCAPLUS
    Cellulose, 2-hydroxypropyl ether (CA INDEX NAME)
    CM
     CRN 9004-34-6
     CMF Unspecified
     CCI PMS, MAN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
    CM
    CRN 57-55-6
     CMF C3 H8 O2
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RN

CN

RN CN

RN

CN

RN

CN

OН

H3C-СH-СH2-ОН

RN 9004-65-3 HCAPLUS

CN Cellulose, 2-hydroxypropyl methyl ether (CA INDEX NAME)

CM 1

CRN 9004-34-6

CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 67-56-1

CMF C H4 O

нзс-он

CM :

CRN 57-55-6 CMF C3 H8 O2

OH

H3C-СH-СH2-ОН

INVENTOR(S):

ACCESSION NUMBER: DOCUMENT NUMBER:

L15 ANSWER 3 OF 8 HCAPLUS COPYRIGHT 2008 ACS on STN

2007:63611 HCAPLUS <<LOGINID::20080310>>

146:148846

TITLE: Pharmaceutical propylene glycol solvate

compositions and method for preparation thereof

Tawa, Mark; Almarsson, Orn; Remenar, Julius

PATENT ASSIGNEE(S): Transform Pharmaceuticals, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 33pp., Cont.-in-part of Appl.

No. PCT/US03/41273.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 18

PATENT INFORMATION:

IIS 6699840

PATENT NO. KIND DATE APPLICATION NO. DATE

US 2007015841 A1 20070118 US 2003-747742 20031229
US 6559293 B1 20030506 US 2002-232589 20020903
US 2003166581 A1 20030904 US 2002-295995 20021118

B2 20040302

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US 2003224006
                         A1
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            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
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    US 2007026078
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            TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
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    WO 2004089313
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            GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
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            NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
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            TD, TG
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PRIORITY APPLN. INFO .:
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US 2002-380288P
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                  A3 20021118
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WO 2003-US41642
                  A 20031229
WO 2004-US400
                  W 20040108
WO 2004-US6288
                  A 20040226
US 2004-548343P
                  P 20040227
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AB The present invention provides a pharmaceutical composition comprising a propylene glycol solvate of a drug which is hygroscopic or has low aqueous solubility It has surprisingly been found that by using propylene glycol to form a solvate of a hygroscopic drug, the hygroscopicity of the drug is decreased and/or the stability and aqueous solubility is increased. The drug is therefore much easier to formulate and store than its counterpart untreated or hydrated form.

169590-42-5, Celecoxib

RL: RCT (Reactant); RACT (Reactant or reagent)

(pharmaceutical propylene glycol solvate compns. and method for preparation thereof)

169590-42-5 HCAPLUS

RN

CN Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1yl]- (CA INDEX NAME)

IT 57-55-6, Propylene glycol, biological studies
RI: RCT (Reactant), THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(pharmaceutical propylene glycol solvate compns. and method for preparation thereof)
RN 57-55-6 HCAPLUS

CN 1,2-Propanediol (CA INDEX NAME)

ΟН

н₃С-Сн-Сн₂-Он

IT 639010-40-5P 919287-67-5P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (pharmaceutical propylene glycol solvate compns. and method
 for preparation thereof)

RN 639010-40-5 HCAPLUS

CN Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]-, sodium salt, compd. with 1,2-propanediol, hydrate (1:1:1:3) (CA INDEX NAME)

CM

CRN 169590-42-5 CMF C17 H14 F3 N3 O2 S

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CM 2
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CRN 57-55-6 CMF C3 H8 O2

OH

HaC-CH-CH2-OH

RN 919287-67-5 HCAPLUS

CN Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]-, sodium salt, compd. with 1,2-propanediol (1:1:1) (CA INDEX NAME)

CM 1

CRN 169590-42-5 CMF C17 H14 F3 N3 O2 S

CM 2

CRN 57-55-6 CMF C3 H8 O2

ОН

H3C-СH-СH2-ОН

IT 639010-33-6, Celecoxib sodium 639010-34-7, Celecoxib lithium 639010-35-8, Celecoxib

potassium

RI: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical propylene glycol solvate compns. and method for preparation thereof)

RN 639010-33-6 HCAPLUS

Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]-, sodium salt (1:1) (CA INDEX NAME)

Na

RN 639010-34-7 HCAPLUS CN Benzenesulfonamide,

Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]-, lithium salt (1:1) (CA INDEX NAME)

• Li

RN 639010-35-8 HCAPLUS

CN Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]-, potassium salt (1:1) (CA INDEX NAME)

L15 ANSWER 4 OF 8 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:1251802 HCAPLUS <<LOGINID::20080310>>

DOCUMENT NUMBER: 146:33009

Injections containing COX II inhibitors and NSAID for TITLE:

analgesic and antiinflammatory action

INVENTOR(S): Jain, Rajesh; Jindal, Kour Chand; Singh, Sukhjeet; Boldhane, Sanjay

PATENT ASSIGNEE(S): Panacea Biotec Ltd., India

SOURCE: PCT Int. Appl., 33pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

P	ΑI	ENT I	NO.			KIN	D	DATE			APPL	ICAT	ION	NO.		D	ATE	
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			MZ, SG,	NA, SK,	NG, SL,	NI,	NO, SY,	LT, NZ, TJ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,
		RW:	AT, IS, CF,	BE, IT, CG,	BG, LT, CI,	CH, LU, CM,	CY, LV, GA,	CZ, MC, GN, NA,	NL, GQ,	PL, GW,	PT, ML,	RO, MR,	SE, NE,	SI, SN,	SK, TD,	TR,	BF, BW,	BJ, GH,
A	U	2005	DE01. 2507	357	·	A A1		TM, 2006 2006	1208 1130	·	IN 2 AU 2	005- 006-	2507	65		2	0050 0060	525
K	CA 2609242 KR 2008016689 IORITY APPLN. INFO.:					A1 A		2006 2008			CA 2 KR 2 IN 2 WO 2	007- 005-	7305 DE13	85 57		2 A 2	0060 0071 0050 0060	227 527

AB Novel and highly stable injectable pharmaceutical compns. comprising at least one cyclooxygenase-II enzyme (COX-II) inhibitor or non-steroidal anti-inflammatory drug (NSAID) or COX/LOX inhibitor, or its tautomeric forms, analogs, isomers, polymorphs, solvates, prodrugs or salts

thereof as active ingredient suitable for parenteral administration preferably by i.m. or i.v. route; process of preparing such compns. and therapeutic methods of using such compns. are provided. The analgesic and anti-inflammatory injectable compns. of the present invention are very useful in mammals particularly in humans for the treatment of acute painful conditions like one or more of post-operative trauma, pain associated with cancer, sports injuries, migraine headache, neurol. pain and pain associated with sciatica and spondylitis, and the like, and/or chronic painful conditions, and/or a variety of painful and inflammatory conditions like postoperative pain, primary dysmenorrhea and painful osteoarthritis, and/or other associated disorders such as inflammation, fever, allergy, or the like. For example, injections contained nimesulide, PEG, propylene glycol, glycine and sodium hydroxide. 57-55-6, Propylene glycol, biological studies 162011-90-7 , Rofecoxib 169590-41-4, Deracoxib 169590-42-5, Celecoxib 181695-72-7, Valdecoxib 202409-33-4, Etoricoxib RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (injections containing COX II inhibitors and NSAID for analgesic and

RN 57-55-6 HCAPLUS CM

antiinflammatory action) 1,2-Propanediol (CA INDEX NAME)

OH

IT

H3C-CH-CH2-OH

RN 162011-90-7 HCAPLUS

2(5H)-Furanone, 4-[4-(methylsulfonyl)phenyl]-3-phenyl- (CA INDEX NAME)

CN

169590-41-4 HCAPLUS RN

> Benzenesulfonamide, 4-[3-(difluoromethyl)-5-(3-fluoro-4-methoxyphenyl)-1Hpyrazol-1-y1]- (CA INDEX NAME)

F₂CH

RN 169590-42-5 HCAPLUS
CN Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]- (CA INDEX NAME)

RN 181695-72-7 HCAPLUS
CN Benzenesulfonamide, 4-(5-methyl-3-phenyl-4-isoxazolyl)- (CA INDEX NAME)

RN 202409-33-4 HCAPLUS
CN 2,3'-Bipyridine, 5-chloro-6'-methyl-3-[4-(methylsulfonyl)phenyl]- (CA INDEX NAME)

L15 ANSWER 5 OF 8 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER . 2005:1049848 HCAPLUS <<LOGINID::20080310>>

DOCUMENT NUMBER: 143:353332

TITLE: Preparation of novel pharmaceutical forms INVENTOR(S): Hickey, Magali Bourghol; Peterson, Matthew; Almarsson,

Orn; Zaworotko, Michael J.; Shattock, Tanise; McMahon, Jennifer; Bis, Joanna; Remenar, Julius; Tawa, Mark

PATENT ASSIGNEE(S): Transform Pharmaceuticals, Inc., USA SOURCE: PCT Int. Appl., 66 pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent.

LANGUAGE: English FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	TENT				KIND DATE					APPLICATION NO.						DATE		
WO	2005089511			A2		20050929 20070222								20050317				
	W: RW:	CN, GE, LK, NO, SY, BW, AZ, EE, RO,	AG, CO, GH, LR, NZ, TJ, GH, BY, ES, SE, NE,	CR, GM, LS, OM, TM, GM, KG, FI, SI,	CU, HR, LT, PG, TN, KE, KZ, FR, SK,	CZ, HU, LU, PH, TR, LS, MD, GB, TR,	DE, ID, LV, PL, TT, MW, RU, GR,	DK, IL, MA, PT, TZ, MZ, TJ, HU,	DM, IN, MD, RO, UA, NA, TM, IE,	DZ, IS, MG, RU, UG, SD, AT, IS,	EC, JP, MK, SC, US, SL, BE, IT,	EE, KE, MN, SD, UZ, SZ, BG, LT,	EG, KG, MW, SE, VC, TZ, CH, LU,	ES, KP, MX, SG, VN, UG, CY, MC,	FI, KR, MZ, SK, YU, ZM, CZ, NL,	GB, KZ, NA, SL, ZA, ZW, DE, PL,	GD, LC, NI, SM, ZM, AM, DK, PT,	ZW
PRIORITY	,	10				US 2004-566647P P 200 US 2004-610296P P 200						0040 0040 0040 0041	430 916					

AB Crystalline salts, polymorphs, solvates, and hydrates of bicalutamide, 5-fluorouracil, donepezil, anastrozole, nelfinavir, mirtazapine, lansoprazole, and tamsulosin, or derivs. thereof are provided by the subject invention. Methods of making and using the same are also provided. Thus, donepezil and nicotinamide were dissolved in EtOH and excess of water to give donepezil tetrahydrate.

57-55-6, Propylene glycol, uses

RL: NUU (Other use, unclassified); USES (Uses) (preparation of novel pharmaceutical forms)

RN 57-55-6 HCAPLUS

1,2-Propanediol (CA INDEX NAME)

OH

н₃C-Сн-Сн₂-Он

IT 639010-42-7p, Celecoxib sodium hydrate
RI: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of novel obarmaceutical forms)

RN 639010-42-7 HCAPLUS

CN Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]-, monosodium salt, hydrate (9CI) (CA INDEX NAME)

Na

IT 639010-33-6, Celecoxib sodium RL: RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)

(preparation of novel pharmaceutical forms)

RN 639010-33-6 HCAPLUS CN Benzenesulfonamide, 4

Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]-, sodium salt (1:1) (CA INDEX NAME)

Na

L15 ANSWER 6 OF 8 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:589401 HCAPLUS <<LOGINID::20080310>>
DOCUMENT NUMBER: 141:128859

TITLE: Pharmaceutical propylene glycol solvate compositions

INVENTOR(S): Tawa, Mark; Almarsson, Oern; Remenar, Julius
PATENT ASSIGNEE(S): Transform Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 317 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 18 PATENT INFORMATION:

PATENT NO.			KIND			DATE			APPL			DATE						
WO	WO 2004060347 WO 2004060347				A2 20040722 A3 20041104				WO 2			20031229						
	W:	AE.	AG.	AL.	AM.	AT.	AU.	AZ.	BA.	BB.	BG.	BR.	BW.	BY.	BZ.	CA.	CH.	
			co,				DE,											
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	RW:	BW.					MW,									AM.	AZ.	
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IIS	6559		22,	20,	B1		2003			US 2				,		0020		
US 6559293 WO 2004000284				A1		2003			WO 2						0030			
	W:			AL.			AU,							BZ.				
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			FR,				IE,											
							CM,											
IS	2005			,	A1		2005			US 2				,		0030		
	2004				A2 20040401					WO 2				20030916				
	2004				A3		2004											
	W:			AL.			AU,		BA.	BB.	BG.	BR.	BY.	BZ.	CA.	CH.	CN.	
							DK,											
			HR,				IN,											
		LS.	LT.	LU.			MD,											
					RU,		SD,											
		UA.	UG.	US,	UZ,	VC,	VN.	YU,	ZA,	ZM.	ZW							
	RW:	GH,	GM.	KE,	LS.	MW.	MZ,	SD,	SL,	SZ.	TZ.	UG,	ZM.	ZW.	AM.	AZ,	BY,	
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		FI,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR.	
		BF.	BJ.	CF.			CM,											
O	2004	0614	33		A1		2004			wo 2						0031		
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							DE,											
		GE,	GH,				ID,											
		LK,	LR,				LV,											
		NZ,					PT,											

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RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
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             ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
             TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
                                20040729
                                         AU 2003-300452
     AU 2003300452
                         A1
                                                                   20031229
    WO 2004089313
                         A2
                                20041021
                                           WO 2004-US9947
                                                                   20040331
    WO 2004089313
                         A.3
                                20051124
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
             ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
             SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
             TD. TG
     US 2006140985
                                20060629
                                            US 2005-541703
                                                                   20050708
                         A1
     US 2006223794
                         A1
                                20061005
                                            US 2005-551014
                                                                   20050929
PRIORITY APPLN. INFO .:
                                            US 2002-232589
                                                               A 20020903
                                            US 2002-437516P
                                                               P 20021230
                                            US 2003-441335P
                                                               P 20030121
                                            US 2003-456027P
                                                               P 20030318
                                                               P 20030321
                                            US 2003-456608P
                                            US 2003-459501P
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                                                               A 20030620
                                            US 2003-601092
                                            WO 2003-US19574
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                                            US 2003-486713P
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                                            WO 2003-US28982
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                                                               A 20031224
                                                               P
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                                                                  20020215
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                                            US 2002-360768P
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                                                               P 20020515
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                                            US 2002-426275P
                                                               P 20021114
                                            US 2002-427086P
                                                               P 20021115
                                            US 2002-295995
                                                               A3 20021118
                                                               P 20021122
                                            US 2002-428515P
                                            US 2002-429515P
                                                               P 20021126
                                            US 2003-439282P
                                                               P 20030110
                                            US 2003-439283P
                                                               P 20030110
                                            US 2003-444315P
                                                               P 20030131
                                            US 2003-451213P
                                                               P 20030228
                                            US 2003-378956
                                                               A 20030303
                                            US 2003-463962P
                                                               P 20030418
                                                               A 20030530
                                            US 2003-449307
                                            US 2003-487064P
                                                               P 20030711
                                            US 2003-637829
                                                               A 20030808
                                            WO 2003-US27772
                                                               A2 20030904
                                            US 2003-660202
                                                               A2 20030911
                                            US 2003-747742
                                                               A 20031229
                                            US 2004-747742
                                                               A1 20031229
                                            WO 2003-US341642
                                                               A 20031229
                                            WO 2003-US41642
                                                               W
                                                                   20031229
                                            WO 2004-US400
                                                               W
                                                                   20040108
                                            WO 2004-US6288
                                                               A 20040226
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Roy P. Issac Page 68

US 2004-548343P

WO 2004-US9947

P 20040227 W 20040331

The invention relates to pharmaceutical compns. comprising propylene glycol solvates of active pharmaceutical ingredients (APIs) which are hygroscopic or has low aqueous solubility. The composition comprises solvate characterized by (i) the mole ratio of propylene glycol to API in the range of 0.25 to 2; (ii) a crystalline form, (iii) a powder X-ray diffraction spectrum which differs from the corresponding powder X-ray diffraction spectrum of the unsolvated API by at least one property, (iv) stability to temps. of up to 50° under a stream of gas in a thermogravimetric anal. apparatus, (v) the API is optionally in the form of a metal salt, such as an alkali or an alkaline earth metal salt, (vi) the API has low aqueous solubility and is selected from steroid drugs, and (vii) the composition further comprises a pharmaceutically-acceptable diluent, excipient or carrier. A method for preparing a propylene glycol solvate of an API comprises (a) contacting propylene glycol with an API in solution, (b) crystallizing a propylene glycol solvate of the API from the solution, and (c) isolating the solvate. For example, to a solution of celecoxib (253 mg, 0.664 mmol) in di-Et ether (6 mL) was added propylene glycol (0.075 mL, 102 mmol). To the clear solution was added potassium t-butoxide in THF (1 M, 0.66 mL, 0.66 mmol). Crystals immediately began to form and after 5 min the solid had completely crystallized The crystalline salt form was found to be a 1:1 propylene glycol solvate of celecoxib potassium salt.

639010-38-1P 639010-39-2P 639010-40-5P

919287-67-5P

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation and compns. of propylene glycol solvates with hygroscopic or low soluble drugs)

639010-38-1 HCAPLUS RN CN

Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1v11-, monopotassium salt, compd. with 1,2-propagediol (1:1) (9CI) (CA

CM 1

CRN 639010-35-8 CMF C17 H14 F3 N3 O2 S . K

CM

CRN 57-55-6 CMF C3 H8 O2

ОН

H3C-CH-CH2-ОН

RN 639010-39-2 HCAPLUS CN Benzenesulfonamide,

Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]-, monolithium salt, compd. with 1,2-propanediol (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 639010-34-7 CMF C17 H14 F3 N3 O2 S . Li

● T.i

CM

CRN 57-55-6 CMF C3 H8 O2

ОН

H3C-СH-СH2-ОН

RN 639010-40-5 HCAPLUS

CN Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]-, sodium salt, compd. with 1,2-propanediol, hydrate (1:1:1:3) (CA INDEX NAME)

CM 1

CRN 169590-42-5

CMF C17 H14 F3 N3 O2 S

$$\begin{array}{c} 0 \\ s - NH_2 \\ 0 \\ \end{array}$$

CM 2

CRN 57-55-6 CMF C3 H8 O2

ОН

Hac-CH-CHo-OH

RN 919287-67-5 HCAPLUS

CN Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]-, sodium salt, compd. with 1,2-propanediol (1:1:1) (CA INDEX NAME)

CM 1

CRN 169590-42-5 CMF C17 H14 F3 N3 O2 S

CM :

CRN 57-55-6

CMF C3 H8 O2

ОН

HaC-CH-CHa-OH

IT 57-55-6, Propylene glycol, reactions 169590-42-5, Celecoxib 639010-33-6, Celecoxib sodium RL: RCT (Reactant); RACT (Reactant or reagent) (preparation and compns. of propylene glycol solvates with hygroscopic or low soluble drugs) RN 57-55-6 HCAPLUS

CN

1,2-Propanediol (CA INDEX NAME)

OH

H3C-CH-CH2-OH

169590-42-5 HCAPLUS RN

CN Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1yl]- (CA INDEX NAME)

RN 639010-33-6 HCAPLUS

CN Benzenesulfonamide, 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1vl|-, sodium salt (1:1) (CA INDEX NAME)

Na

L15 ANSWER 7 OF 8 HCAPLUS COPYRIGHT 2008 ACS on STN

2001:747580 HCAPLUS <<LOGINID::20080310>> ACCESSION NUMBER:

DOCUMENT NUMBER: 135:278052

TITLE: Oily compositions containing highly fat-soluble

drugs

INVENTOR(S): Nishihara, Yoshitaka; Kinoshita, Haruki; Yoshikawa,

Takayoshi

PATENT ASSIGNEE(S): Shionogi & Co., Ltd., Japan SOURCE: PCT Int. Appl., 50 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PAT	PATENT NO.						D DATE APPLICATION NO.											
	WO	WO 2001074331																	
		W: AE, AG, A		AL,	AM,	AT,	AU,	AZ,	BA,	ВВ	, BG	BR,	BY,	BZ,	CA,	CH,	CN,		
			co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE	, ES.	FI,	GB,	GD,	GE,	GH,	GM,	
			HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG	, KR	KZ,	LC,	LK,	LR,	LS,	LT,	
		L		LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX	, MZ	NO,	NZ,	PL,	PT,	RO,	RU,	
			SD,	SE,	SG,	SI,	SK,	SL,	ΤJ,	TM,	TR	, TT.	TZ,	UA,	UG,	US,	UZ,	VN,	
				ZA,															
		RW:										, TZ							
												, LU					TR,	BF,	
												, MR							
AU 2001044614													20010329						
CA 2404381																			
	EP 1273287																		
		R:										, IT.		LU,	NL,	SE,	MC,	PT,	
IE, SI, LT,																			
JP 3831253 MX 2002PA09763 US 2003149061											2001-								
								20030807									0021		
	PRIORITY	Y APP	LN.	INFO	. :							2000-							
								WO	2001	-JP26	21	1	W 2	0010	329				
OTHER SOURCE(S):						MAR	PAT	135:	2780	52									

OTHER SOURCE(S): MARPAT 135:278052

Disclosed are oily compns. which contain as the principal agent highly fat-soluble drugs, pharmaceutically acceptable salts and solvates thereof and further contain (1) a triester of glycerol

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with a medium-chain fatty acid and/or an ester of propylene glycol with a
    medium-chain fatty acid, (2) a triester of glycerol with a long-chain
     fatty acid, and (3) a surfactant. An emulsion contained
     3''-fluoro-2',3',5',6'-tetramethy1-N-(3-methy1-2-buteny1)-4''-[(3-methy1-2-
     butenyl)oxy]-[1,1':4',1''-terphenyl]-4-amine 10 %, Miglyol-812 60 %,
     avocado oil 10 %, and sorbitan monopalmitate 20 %.
     57-55-6D, Propylene glycol, esters with medium-chain fatty acids
     106392-12-5, pluronic F87
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (oily compns, containing highly fat-soluble drugs)
     57-55-6 HCAPLUS
RN
CN
     1,2-Propagediol (CA INDEX NAME)
    ОН
HaC-CH-CH2-OH
     106392-12-5 HCAPLUS
CN
     Oxirane, 2-methyl-, polymer with oxirane, block (CA INDEX NAME)
    CM
     CRN 75-56-9
    CMF C3 H6 O
    СНЗ
    CM
    CRN 75-21-8
     CMF C2 H4 O
REFERENCE COUNT:
                        39
                               THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L15 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:
                         1999:247477 HCAPLUS <<LOGINID::20080310>>
DOCUMENT NUMBER:
                         131:92418
TITLE:
                         Cyclodextrins as permeation enhancers: some
                         theoretical evaluations and in vitro testing
                        Masson, Mar; Loftsson, Thorsteinn; Masson, Gisli;
AUTHOR(S):
                         Stefansson, Einar
CORPORATE SOURCE:
                         Department of Pharmacy, University of Iceland, P.O Box
                         7210, Reykjavik, IS-107, Iceland
SOURCE:
                        Journal of Controlled Release (1999), 59(1), 107-118
                        CODEN: JCREEC; ISSN: 0168-3659
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DM

PHRI.TSHER .

Rov P. Issac Page 74

Elsevier Science Ireland Ltd.

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DOCUMENT TYPE: Journal LANGUAGE: English
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It is well known that cyclodextrins can enhance the permeation of poorly soluble drugs through biol. membranes. However, the permeability will decrease if cyclodextrin is added in excess of the concentration needed to solvate the drug. The mechanism of cyclodextrin effect on drug permeability has not been fully explained. The effect of cyclodextrins cannot be explained as solely due to increased solubility of the drug in the aqueous donor phase nor can it be explained by assuming that cyclodextrins act as classical permeation enhancers, i.e. by decreasing the barrier function of the lipophilic membrane. In the present work, we modeled the effect of cyclodextrins in terms of mixed barrier consisting of both diffusion and membrane controlled diffusion, where the diffusion of the drug in the aqueous diffusion layer is significantly slower than in the bulk of the donor. This diffusion model is described by simple math, equation where the properties of the system are expressed in terms of 2 consts. PM/Kd and M1/2. Data for the permeation of hydrocortisone through hairless mouse skin in the presence of various cyclodextrins, and cyclodextrin polymer mixts., were fitted to obtain values for these 2 consts. The rise in flux with increased cyclodextrin complex concentration and fall with excess cyclodextrin was accurately predicted. Data for the permeation of drugs through a semi-permeable cellophane membrane could also be fitted to the equation. Cyclodextrins act as permeation enhancers carrying the drug through the aqueous barrier, from the bulk solution towards the lipophilic surface of biol, membranes, where the drug mols, partition from the complex into the lipophilic membrane.

IT 57-55-6D, 1,2-Propanediol, cyclodextrin ethers, biological studies 9004-65-3D, HPMC, cyclodextrin ethers

RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (cyclodextrins as permeation enhancers of drugs)

RN 57-55-6 HCAPLUS

CN 1,2-Propanediol (CA INDEX NAME)

OH

RN

H3C-СH-СH2-ОН

9004-65-3 HCAPLUS

CN Cellulose, 2-hydroxypropyl methyl ether (CA INDEX NAME)

CM 1

CRN 9004-34-6

CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 67-56-1

CMF C H4 O

нзс-он

CM 3 CRN 57-55-6 CMF C3 H8 O2

ОН | Н3С-СН-СН2-ОН